



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,941	01/03/2002	Carolyn Jean Cupp	112701-330	7917
29157	7590	08/31/2009		
K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690				
EXAMINER				
SAYALA, CHHAYA D				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
08/31/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* CAROLYN JEAN CUPP,  
LYNN ANN GERHEART,  
SCOTT SCHNELL,  
SHERI LYNN SMITHEY, and  
DONNA ELIZABETH ANDERSON

---

Appeal 2009-003326<sup>1</sup>  
Application 10/037,941  
Technology Center 1700

---

Decided: August 27, 2009

---

Before CATHERINE Q. TIMM, MICHAEL P. COLAIANNI, and  
JEFFREY B. ROBERTSON, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 the final rejection of claims 1-33. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

---

<sup>1</sup> Oral arguments were heard in this appeal on August 13, 2009.

We AFFIRM.

Appellants describe a dried pet food having a particular claimed size and a density from about 16.8 lbs/ft<sup>3</sup> to about 20 lbs/ft<sup>3</sup> (claim 1; Spec. 3). The Specification discloses that reducing the density and increasing the size of the pet food removes more plaque and tartar build-up than similar pet food products (Spec. 3).

Claims 1 and 21 are illustrative:

1. A dried pet food comprising a matrix comprising a protein source, a carbohydrate source, insoluble fiber and the dried pet food having an unstriated appearance and comprising a length of at least 15 mm, a width of at least 13.5 mm, and a thickness of at least 12 mm, the length being greater than the thickness wherein the dried pet food has a density that ranges from about 16.8 lbs/ft<sup>3</sup> to about 20 lbs/ft<sup>3</sup>.

21. A pet food comprising at least two different sized kibbles including a first sized kibble and a second size kibble wherein the first sized kibble is larger in size than the second sized kibble, wherein the first sized kibble and the second sized kibble are present in a ratio of approximately 20 to about 80% to approximately 80 to about 20%, and at least one kibble having an unstriated appearance and a density that ranges from about 16.8 lbs/ft<sup>3</sup> to about 20 lbs/ft<sup>3</sup>.

The Examiner relies on the following prior art references as evidence of unpatentability:

Procter	US 4,259,361	Mar. 31, 1981
Staples	US 5,000,940	Mar. 19, 1991
Simone	US 5,407,661	Apr. 18, 1995
Hand	US 5,431,927	Jul. 11, 1995
Speck	US 6,025,004	Feb. 15, 2000
Collings	EP 0 645,095 A1	Mar. 29, 1995

The rejections provided by the Examiner are as follows:

1. Claims 1-20 and 25-33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hand and Collings in view of Speck and Procter.

2. Claims 21-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hand and Collings in view of Speck, Procter, and Staples or Simone.

Regarding rejection (1), Appellants argue claims 1-20 and 25-33 as a group (App. Br. 10-20). Specifically, Appellants argue the same features present in independent claims 1, 7, 13, 18, and 28 as a group (App. Br. 12-20). We select claim 1 as representative of the group on which to render our Decision.

Regarding rejection (2), Appellants argue claim 21 only (App. Br. 20-22). Accordingly, the rejection of claims 22-24 stands or falls with claim 21.

*REJECTION (1): Hand and Collings in view of Speck and Procter*

ISSUES

1. Have Appellants shown that the Examiner reversibly erred in determining that the claimed density and pet food size would have been determined by routine optimization in light of the teachings of Hand, Collings, Speck, and Procter, as a whole? We decide this issue in the negative.
2. Have Appellants shown that the Examiner erred in finding a reason to combine Hand, Collings, Speck, and Procter to arrive at the claimed invention? We decide this issue in the negative.

PRINCIPLES OF LAW

The applicant bears the procedural burden of showing error in the Examiner's rejections. *See, e.g., In re Kahn*, 441 F.3d 977, 985-86 (Fed.

Cir. 2006) (“On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness”) (citation and internal quote omitted).

Where general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456 (CCPA 1955). However, exceptions to this rule include if the results of optimizing a variable, known to be result effective, were unexpectedly good, or if a parameter optimized was not recognized as a result-effective variable. *In re Antonie*, 559 F.2d 618, 620 (CCPA 1977).

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

#### FACTUAL FINDINGS (FF)

1. Appellants do not dispute the Examiner's determination that it would have been obvious from the teachings of Hand, Collings, and Speck to optimize the density of the pet food to achieve Appellants' claimed density (Ans. 3-8; App. Br. 12-20).
2. Hand teaches that density of the pet food product affects the mechanical cleaning efficacy of the pet food (col. 4, ll. 64-66). Hand

discloses that the density of a striated pet food product may have a density ranging from about 10 to about 35 pounds per cubic foot (col. 4, ll. 42-45). Hand further teaches that maximum mechanical cleaning efficacy is achieved when the striated pet food has a density of about 20 to about 30 pounds per cubic foot (col. 4, ll. 64-66). Hand further exemplifies a comparative example where an unstriated product was formed by using turbulent flow conditions and the resulting product was found to crumble (col. 10, ll. 13-23).

3. Collings discloses in the prior art that Hand's method was adapted to form an unstratified pet food product, but the product achieved did not possess sufficient structural integrity and broke when the package containing the food was dropped (p. 2, ll. 30-34).
4. Collings discloses that a critical feature to achieve a solid, uniform, expanded composition with sufficient structural integrity is controlling the moisture content of the pet food according to a relationship between drying time and temperature (p. 4, ll. 1-15).
5. Speck discloses that it is known to use extruders to form dry pet food products and that the bulk density of the extruded food product is an important variable to control (col. 1, ll. 13-42; col. 2, ll. 30-53).
6. The Examiner finds, and Appellants do not contest, that the average dimension of Appellants' kibble of claim 1 is 0.53 inches (Ans. 8, 12-13; App. Br. 13).
7. Procter discloses that the kibble formed has a size of "about ½ inch" (col. 2, ll. 62-67).

## ANALYSIS

### *Issue (1): Claim Features not Taught or Suggested*

Appellants argue that none of the prior art references teach the claimed density of an unstriated pet food product (App. Br. 12-13). Appellants contend that Hand discloses the density of a striated product only, not an unstriated product density as claimed (App. Br. 13).

However, these arguments are unpersuasive because they fail to show error in the Examiner's determination it would have been obvious to optimize the density of an unstriated product as taught by Collings based on the teachings of the references that recognize density of the pet food as an important variable to control the mechanical cleaning efficacy of the pet food (i.e., a result-effective variable). Appellants' arguments never address the Examiner's optimization rationale. Accordingly, Appellants have not shown that the Examiner erred with regard to the determination that it would have been obvious for one of ordinary skill in the art to optimize the claimed unstriated product density to be within the claimed range of 16.8 to 20 lbs/ft<sup>3</sup>.

Appellants argue that "a skilled artisan would recognize that *Procter* is directed toward a kibble size that is not greater than 0.50 [inch], accounting for slight variations either way" (App. Br. 14). Appellants contend that Procter fails to disclose or suggest a kibble size that is about 0.53 inches, the average dimension of the three claimed dimensions (App. Br. 13-14).

As Appellants' arguments plainly recognize the "about ½ inch (average of measurements in the three dimensions)" kibble size disclosed by Procter includes kibble that may be slightly larger than 0.50 inches.

Therefore, the claimed kibble size having an average dimension in three directions of 0.53 inches would have been included as a “slight variation” above Procter’s disclosed “about” 0.50 inch.

Moreover, Appellants do not contest and, thus, have not shown error, in the Examiner’s determination that it is common knowledge that all pets do not have the same bite size such that it would have been within the knowledge of those skilled in the art to optimize the pet food size to suit the particular breed size or age (Ans. 9). The Examiner’s determinations that “[t]he manufacture of a predetermined, particularly-sized kibble within the measurements given by Hand and even Procter’s about ½ [inch], is well within the skill of the artisan, given the fact that 1) Speck et al. provides evidence that an extruder can have the extruder knife so positioned so as to cut the extrudate to a desired size kibble . . . and 2) the size of a kibble is based on the size of a dog/the bite size of the dog” (Ans. 12-13) also remain uncontested by Appellants. Appellants have not shown error in the Examiner’s determination that the claimed size of the pet food would have been obvious over the cited references.

*Issue (2): Reason to Combine*

Appellants argue that the evidence submitted in an affidavit<sup>2</sup> establishes that striated and unstriated pet food products have different

---

<sup>2</sup> Appellants refer to the Supplemental Cupp Affidavit filed August 1, 2006 and attached to the Appeal Brief in Appendix I. Our review of the Supplemental Cupp Declaration does not find any discussion of striated and unstriated products. Instead, the Cupp Affidavit filed January 26, 2006 and considered by the Examiner contains the referenced information. Accordingly, we have considered the Cupp and Supplemental Cupp Affidavits of record.



properties such that Hand's striated pet food product teaches away from Colling's unstriated pet food product (App. Br. 14-15). Appellants argue that Collings teaches away from the composition and process of Hand because Collings discloses that the unstriated products formed using the modified Hand process, crumbled and did not possess sufficient structural integrity (App. Br. 15-16, 18). Appellants contend that Procter and Speck are unconcerned with the extrusion of pet food such that the claimed invention would not have been obvious (App. Br. 18-19). Appellants contend that the Examiner picks and chooses portions of the references to arrive at the claimed invention instead of considering the teachings of the references as a whole, such that impermissible hindsight was used to piece together the references (App. Br. 19).

Appellants' arguments are unpersuasive because they improperly attack the references individually instead of addressing what the combined teachings of the references would have suggested to one of ordinary skill in the art. *Keller*, 642 F.2d at 425. Specifically, Appellants argue that Hand's striated product or Collings' unstriated product teach away from the combination, and that Speck and Procter are unconcerned with extrusion of pet food. However, the Examiner is not suggesting to combine Hand's striated process and Collings' unstriated process. Rather, the Examiner determines that the teachings of Hand, Collings, Speck, and Procter, as a whole, would have suggested optimizing the density and size of the pet food product to the particularly claimed density and size. Appellants have not addressed this Examiner position.

Moreover, we do not find that Hand and Collings discourage one of ordinary skill in the art from combining the teachings so as to teach away.

To the contrary, Collings, like Hand, teaches that Hand's process may be adapted to form unstriated pet food products, but that the unstriated pet food products may crumble if dropped. Accordingly, Collings' invention is to control the drying of the unstriated pet food products to achieve products with suitable structural integrity (FF 3 & 4).

Contrary to Appellants' hindsight argument, the Examiner has used the teachings of the references, as a whole, as a basis for combining Hand, Collings, Speck, and Procter (*See e.g.*, Ans. 3-9). Accordingly, the Examiner has not improperly picked and chosen only those portions of the references relevant to the claimed invention. The record is abundantly clear that the Examiner properly considered the teachings of the references as a whole.

Appellants' Cupp Affidavit is provided to show that the art teaches away from the Examiner's combination and that the claimed invention significantly improves the cleaning of dogs' teeth (Cupp Affidavit 1-3). Appellants contend that since the normal operation of extruders in manufacturing pet food is turbulent flow, then Hand's disclosure that using turbulent flow produces a pet food that crumbles shows that Appellants' use of turbulent flow to produce a pet food with improved mechanical teeth cleaning would not have been obvious (App. Br. 16). However, Appellants' argument, like those discussed earlier, improperly attacks the references individually, instead of addressing the combined teachings of the references.

The Cupp Affidavit also compares the cleaning ability of examples 3 and 4 of the Specification with that of standard dry dog food (Cupp Affidavit 2). Appellants allege that because standard dry dog food would most likely be produce via "normal" (i.e., turbulent) flow conditions, the comparison

demonstrates improved properties. However, Appellants' mere allegation does not establish that the standard dry dog food used in the examples is made using turbulent flow. In other words, Appellants have not compared Examples 3 and 4 from the Specification with the closest prior art, Collings, that forms unstriated pet food. Accordingly, we cannot determine whether the Cupp Affidavit demonstrates that the claimed invention significantly improves the cleaning of dogs' teeth relative to the closest prior art.

Appellants argue that combining Hand's striated product with Collings' unstriated product would not have been obvious because doing so would change the principle of operation of the prior art being modified (App. Br. 18). Appellants' argument fails to realize that the Examiner is not suggesting to incorporate bodily the striated material of Hand into Collings' unstriated product. Rather, the combined teaching of Hand and Collings would have suggested that the structural integrity of an unstriated pet food product may be improved by controlling the dry process, and in so doing produce a harder to fracture pet food that aids in cleaning teeth.

We find that Appellants have not shown error in the Examiner's finding that the claimed density or pet food size would have been obvious over Hand and Collings in view of Speck and Procter. Appellants have not shown error in the Examiner's reason for combining Hand, Collings, Speck, and Procter. Therefore, we affirm the Examiner's § 103 rejection of claims 1-20, and 25-33 over the combined teachings of Hand, Collings, Speck, and Procter.

*Rejection (2): Hand and Collings in view of Speck, Procter, Simone, and Staples.*

### ISSUE

Have Appellants shown that the Examiner erred in determining that the applied prior art teaches or suggests a pet food comprising two different sized kibbles present in an amount of 80% to 20% as required by claim 21? We decide this issue in the negative.

### FINDINGS OF FACT

8. The Examiner finds, and Appellants do not contest, that it is well known in the art to produce a variety of kibble sizes for pets depending on their bite-size and/or breed size (Ans. 10-11; App. Br. 20-21).
9. The Examiner further finds, and Appellants do not contest, that the claimed ratio includes any sized kibble such “that there appears to be no criticality in either the variation in size or amount [of the different sized kibble], and that a mixture such as the one claimed, provides a variation of sizes to the pet . . .” (Ans. 10; App. Br. 20-21).

### PRINCIPLES OF LAW

We rely on the same principles of law stated earlier in the Decision.

The obviousness “analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

Where the difference between the claimed invention and the prior art is some range or other variable within the claims, applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1577-78 (Fed. Cir. 1990).

A factual finding not shown by Appellants to be erroneous may be accepted as fact. *In re Kunzmann*, 326 F.2d 424, 425 n. 3 (CCPA 1964).

### ANALYSIS

The Appellants argue that none of the prior art teaches or suggests a pet food having two kibble sizes in the claimed ratio (App. Br. 20-21). Specifically, Appellants contend that, contrary to the Examiner's position, the prior art disclosure of a range of sizes indicates that the kibble maybe cut into a variety of single sizes (i.e., all the kibble would be the same size) (App. Br. 21). However, Appellants' arguments have not shown error in the Examiner's explicit finding that producing a pet food with a variety of kibble sizes is well known in the art (FF 8).

Moreover, Appellants have not shown that the Examiner erred in determining that there appears to be no criticality to the ratio (i.e., 80% to 20% or 20% to 80%) of kibble sizes such that the claimed ratio would have been obvious. *Woodruff*, 919 F.2d at 1577-78. Appellants have not proffered any evidence to establish kibble having the claimed ratio produces unexpected results.

Because Appellants have not shown error in the Examiner's position regarding the variety of kibble sizes and the ratio of kibble sizes, we accept the Examiner's findings as fact. *Kunzmann*, 326 F.2d at 425 n. 3.

For the above reasons, we affirm the Examiner's § 103 rejection of claims 21-24 over Hand and Collings in view of Speck, Procter, Simone, and Staples<sup>3</sup>.

DECISION

The Examiner's § 103 rejections are affirmed

The Examiner's decision is affirmed.

ORDER

AFFIRMED

cam

K & L GATES LLP  
P O BOX 1135  
CHICAGO IL 60690

---

<sup>3</sup> Because Appellants do not argue the teachings of Simone and Staples, we do not discuss them in this Decision.